L 47310-66 EWT(1)/FCC GW

ACC NR: AR6028405 SOURCE CODE: UR/0269/66/000/005/0055/0055

AUTHOR: Mustel', E. R.; Bonelis, I. V.; Kubyshkin, V. V. 37 B

TITLE: The effect of cosmic rays on the lowest layer of the Earth's atmosphere

SOURCE: Ref. zh. Astronomiya, Abs. 5.51.429

REF SOURCE: Astron. tsirkulyar, no. 333, iyulya 10, 1965, 1-6

TOPIC TAGS: cosmic ray, atmospheric pressure, chromospheric flare, solar flare

ABSTRACT: According to Soviet and Western Europe weather bureaus, the earth's atmospheric pressure increases on the 6th day after an active area passes through the center of the solar disk (an average of 13,878 active areas during the 1907-1952 period). This fact correlates with an increase in geomagnetic activity. After chromospheric flares, the atmospheric pressure on the Sun increases sychronously with an increase of geomagnetic activity (on the 4th day after a flare). Thus, the effect of solar corpuscular streams causes an increase

Card 1/2 UDC: 523.75:523.165+525.24

L 47310-66

ACC NR: AR6028405

in atmospheric pressure. At the same time, a decrease in atmospheric pressure occurs in the area of geomagnetic polar caps immediately following flares. The authors have associated this phenomenon with the activity of subrelativistic proton streams. Orig. art. has: 9 reference items. G. Ivanov-Kholodnyy. [FM]

[Translation of abstract]

SUB CODE: 03/

Card 2/2 afs

ACC NR: AR6028770 SOURCE CODE: UR/0269/66/000/006/0064/0064

AUTHOR: Bonelis, I. V.; Zaleshchenko, R. I.

TITLE: Atmospheric disturbances in low latitudes and in the southern hemisphere, caused by recurrent corpuscular solar fluxes

SOURCE: Ref. zh. Astronomiya, Abs. 6.51.489

REF SOURCE: Sb. Solnechn. aktivnost'. No. 2. M., Nauka, 1965, 88-91

TOPIC TAGS: solar activity, solar disc, solar disturbance

TRANSLATION: The relationship between disturbances in the lower atmosphere and the passage of active areas through the center of the solar disc was examined. Data on solar activity for 1957-59 and 1961-62 were used. Seven geographic points in the preequatorial zone and the southern hemisphere were considered. The principal source material used was data on atmospheric pressure in South America. The maximum pressure for all points was noted on the sixth day after the active area passed through the center of the solar disc. Previously, the authors obtained similar results for the northern hemisphere. A relationship between the amplitude of atmospheric disturbances and the geomagnetic latitude exists both in the southern and northern hemispheres. 11 references. B. Rubashev.

SUB CODE: 03

UDC: 523.75:525.23

Card 1/1

BONENBERG, Lucyna; GLOWACKA, Roza; PETELENZOWA, Teresa

A case of excretion of a large biliary calculus by vesicocolic fistula with spontaneous closure of the fistula. Polski tygod. lek. 14 no.42:1875-1878 19 Oct 59.

1. (Z II Kliniki Chorob Wewnetrznych Sl. A. M. w Zabrzu; kierownik: prof. dr med. Witold Zahorski i Zakladu Radiologii Lek. Sl. A. M. w Zabrzu; kierownik: prof. dr med. Stanislaw Januszkiewicz)
(RECTAL FISTULA) (INTESTINAL FISTULA)
(CHOLELITHIASIS)

7

15

The Effect of Basic Refractory Materials on the Construction of Steel Furnaces. Z. Doroszewski, W. Klimaszik, J. Niedziela and W. Zbroja. (Hutnik, 1954, 22, (10), 356-370). [In Polish]. The old and new methods of the construction of O.H. furnaces are compared. Recently, a more refractory material, chromite-magnesite, working range of temperature 1750-1800° C, has found wide application, particularly in the construction of the roofs. The use of basic refractory materials in electric furnaces is discussed. Modifications in the construction of the steel furnaces in connection with the use of the new refractory materials are recommended.—E. N.

PM

BONENBERG, Z.

The open-hearth furnace and its new profile. p. 27.

PROBLEMY PROJEKTOWE HUTNICTWA. (Biruo Projektow Przemyslu Hutniczego, Biuro Projektow Przemyslu Stalowego i Biuro Projektow Przemyslu Metalowego), Gliwice, Poland
Vol. 7, No. 1, Jan 1959

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, No. 11, November 1959
Uncl.

TERNOVOY, M.P., inzh.; BONESKO, V.A.

Repair of damaged shafts of radial-flow turbines. Energetik 12 no.5:36-37 My '64. (MIRA 17:6)

ROZIN, D.S., inzh.; TERNOVOY, M.P., inzh.; BONESKO, V.A., inzh.

Damages and repairs of radial-flow Siemens-Schuckert turbines.
Energetik 14 no.1:10-13 Ja '66. (MIRA 19:1)

[redacted], A. A.

"Investigation of the Polarization of Precooled Organic Liquids in Connection With the Chemical Structure of Molecules." Sub 5 Oct 51, Moscow Order of Lenin State U imeni M. V. Lomonosov.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

Cand. Chemical Sci.

BONETSKAYA N.K.

USSR/ Chemistry Physical chemistry

Card : 1/1

Authors : Komandin, A. V., and Bonetskaya, A. K.

Title : Dipole moments of certain salicylic acid derivatives

Periodical : Zhur. fiz. khim. 28, Ed. 6, 1113 - 1119, June 1954

Abstract : The dipole moments of methyl salicylate, ethyl salicylate, isoamyl salicylate, phenyl salicylate and 2-naphthyl salicylate, were measured in benzene solutions and the dipole moments of orthoacetoxybenzoic acid in a dioxane solution at 25°. The laws governing the change in dipole moments in many salicylic acid derivatives and the effect of the intramolecular hydrogen bond on the change of the dipole bonds, are explained. Drawing of the device used in measuring the dielectric permeability of the solutions, is included. Twenty references: 4 USSR, 16 German and English. Tables.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : November 13, 1953

BONETSKAYA, A. K.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 12/25

Authors : Komandin, A. V., and Bonetskaya, A. K.

Title : Dipole moments of orthohydroxybenzoic acid substitutes

Periodical : Zhur. fiz. khim. 28/10, 1789-1794, Oct 1954

Abstract : In order to explain the effect of the hydrogen bond on the dipole moment, the authors measured the dipole moments of the following substitutes of orthohydroxybenzoic acid; orthomethoxy- and orthophenoxybenzoic acid, methyl ether of orthomethoxybenzoic acid and salipyrine (the letter represents a molecular compound of salicylic acid and antypyrine). Data regarding the measured dielectric permeability, density, and index of refraction for various concentrations of the dissolved substances are presented. The chemical structure of the substitutes is described. Twelve references: 4-USSR; 5-German; 2-USA and 1-French (1893-1954). Tables.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : February 17, 1954

BONETSKAYA, A.K.

4

4=41

Adsorption and the heat of adsorption from solutions on barium sulfate. A. K. Bonetskaya and V. V. Marina. *Vestnik Moskov. Univ., Ser. Mat., Mekh., Astron., Fiz., Khim.*, No. 1, 165-8(1950).—The adsorption and heat of adsorption were measured for BzOH, and methyl (I) and phenyl salicylate (II) on $BaSO_4$ from their solns. in heptane. The heats of wetting and adsorption at first increase rapidly with increasing concn. and finally become const. The limiting values of adsorption decrease in the order BzOH, I, II (0.040, 0.033, and 0.028 millimoles/g.).
J. Rovtar Leach

Kafedra obshchey fiziki dlya Khimicheskogo fakul'teta Moskovskogo universiteta.

456. Obtaining highly dispersed non-porous silica by the burning of organic silicon compounds. A. K. ROMEYKAVA, E. A. LEONT'EV, and B. A. KHARLAMOV (*Zh. Prikl. Khim.*, 30, 1237, 1957). In Russian. The pore diameter of different silica gels may range between 20 A and 200 A. The preparation of a highly dispersed non-porous silica might be interesting, not only for possible technical uses but also for study of the general principles of the adsorption theory for those cases in which it is necessary to exclude the influence of pores on the nature of the adsorption process studied. In view of this, a method and a laboratory apparatus were developed to produce "white soot" (a highly dispersed silica) by burning ethyl orthosilicate. (3 figs.)

Distr: 4E4j/4E2c(j)

AUTHORS: Bonetskaya, A. K., Krasil'nikov, K. G. 20-114-6-33/54

TITLE: The Adsorption of Aliphatic Alcohols From Solutions on Silica Gel and White Soot
(Adsorbtsiya alifaticheskikh spirtov iz rastvorov na silikagele i beloy sazhe).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 114, Nr 6, pp. 1257-1260 (USSR)

ABSTRACT: From earlier papers (references 1,2,11) follows that the adsorbed maximum amound of alcohols and acids of the homologous series with an increase in the hydrocarbon radical decreases to porous hydrophile adsorbents. In this connection the highest adsorption value in the case of comparatively coarse-grained adsorbents remains constant (references 3,11). The reduction of absorption in the homologous series was explained by a volume-interaction in solutions (different solubility of the terms of the homologous series, reference 1) or ascribed to the influence of the porous structure of the adsorbent (references 3,5). In the case of the nonporous hydrophile absorbents it could be expected (references 2-4) that the adsorbed maximum quantity of the alcohols and acids of the homologous series was constant. The adsorption measurements

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on nonporous hydrophobe adsorbents for unlimitedly soluble alcohols and acids from aqueous solutions (references 6,7) show that the limit of adsorption is shifted upward with the number of carbon atoms in the molecule. Comparisons of adsorption isothermal lines for hydrophile adsorbents are, as far as is known, absent. In the present work the authors performed the adsorption of a number of normal aliphatic alcohols from solutions in CCl_4 on 2 silica samples of different structure. Silica gel KSK-2 (reference 9) was the porous sample. So-called white soot was used as nonporous sample. The samples were sharply different in their structure, but possessed a practically equal hydrated surface. As follows from figure 1 A, the results obtained from both samples are qualitatively not different from each other, for in both cases the maximum value of adsorption decreases with the lengthening of the carbon chain. This value is shifted into the domain of smaller equilibrium concentrations (reference 12). If it is assumed that this decrease can be effected by the competition of the solvent, the adsorption of the latter should increase with

a decrease of the adsorption of alcohol, i.e. on transition to the higher alcohols. The authors tried an extrapolation of the inclined part of the adsorption isotherm of octyl-alcohol on silica gel to the domain of high concentrations, so that a value was obtained which lies close to the concentration of pure alcohol. Due to the inaccuracy of such an extrapolation additional tests on the adsorption of CCl_4 and its solutions in octylalcohol were carried out. But no perceptible modifications of adsorption were determined in the domain of concentrations in cuestion here. From the isothermal lines obtained the authors calculated the values of the total content of the adsorbed substance in the surface layer a (table 1). Thus the decrease in adsorption of the alcohols with a lengthening of the hydrocarbon chain cannot be ascribed to the competition of the solvent. The authors try to explain this phenomenon by a special mode of orientation of the alcohol-molecules in the solid surface layer so that the chains predominantly "lie" on the surface. In such a case the surface taken up by the molecule will be dependent on the above-mentioned length of chain. For determining the

The Adsorption of Aliphatic Alcohols From Solutions on Silica Gel and White Soot

influence of the porous structure upon the maximum value of absorption the obtained results were related to 1 m. of the surface. The adsorption isothermal lines of methyl alcohol on both adsorbents agree (figure 1 B). The adsorption on the porous sample increases with increasing number of carbon atoms. According to table 1 and figure 2 the maximum volume of the adsorption of all investigated alcohols changes little on nonporous soot.
There are 2 figures, 1 tables, and 16 references, 11 of which are Slavic.

ASSOCIATION: Moscow State University imeni M. V. Lomonosov,
(Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

The Adsorption of Aliphatic Alcohols From Solutions on Silica Gel and White Soot 20-114-6-33/54

PRESENTED: January 8, 1957, by M. M. Dubinin, Academician

SUBMITTED: December 29, 1956

Card 5/5

5(3) SOV/156-59-1-28/54

AUTHORS: Bonetskaya, A. K., Skuratov, S. M., Monayenkova, A. S.

TITLE: The Determination of the Purity of Organic Substances With the Aid of Melting Curves (Opredeleniye chistoty organicheskikh vesnchestv po krivym plavleniya)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 1, pp. 113-116 (USSR)

ABSTRACT: A method is proposed for which only small quantities are required (0.4 mole). The apparatus shown comprises an aluminum block, which is electrically heated from the outside and in which the cone-shaped measuring vessel is introduced. In the measuring vessel (which consists of 0.4 mm thin silver plate) a solid silver cone is centrically suspended with a clearance of 0.6-0.7 mm between the cone and the wall of the measuring vessel. The cone contains a thermocouple of high sensitivity. The temperature gradient between the aluminum block and the sample is maintained constant by another thermocouple. The sample is introduced in a molten state into the measuring vessel and the silver cone is suspended in the vessel to urge the sample as a thin layer against the wall of the vessel. The apparatus was tested with diphenyl-amine,

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The Determination of the Purity of Organic Substances With the Aid of Melting Curves

diphenyl and caprolactam, to which up to 1 mole-percent of other substances had been admixed. The tables show that impurities between 0.3 and 0.7 mole-percent were indicated with an accuracy of ± 0.03 mole-percent. Ye. N. Kanarskaya, I. Ye. Paukov, V. V. Ponomarev, and Yu. I. Rubtsov assisted in this work. There are 1 figure, 2 tables, and 9 references, 1 of which is Soviet.

ASSOCIATION: Kafedra fizicheskoy khimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova
(Chair of Physical Chemistry of Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 28, 1958

SOV/76-33-3-10/41

5(4)

AUTHORS: Komandin, A. V., Bonetskaya, A. K.

TITLE: Density and Molar Volume of Several Organic Compounds in a Broad Range of Temperature (Plotnosti i molyarnyye ob"yemy nekotorykh organicheskikh soyedineniy v shirokom intervale temperatur)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3, pp 566 - 571 (USSR)

ABSTRACT: Density and molar volume in the temperature range 100-200° were determined for the liquid and supercooled liquid state of the following 11 substances: methyl-, ethyl-, isoamyl-, phenyl-, (salol) and 2-naphthyl- (betol)-esters of o-hydroxy benzoic acid, o-acetoxy benzoic acid (aspirin), the methyl esters of o-methoxy benzoic acid, salipyrine, o-methoxyphenol (guaiacol), 3-methyl-6-isopropylphenol (Thymol) and benzophenone. Density in solid state was determined at room temperature for: the phenyl- and 2-naphthyl esters of o-hydroxy benzoic acid, o-aceto benzoic acid, 3-methyl-6-isopropylphenol and benzophenone; these data are, however, to be re-

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garded as orientation data only. The production of guaiacol, thymol and benzophenone is given, the way of production of the other substances has already been described (Ref 4). The density was measured by means of a pycnometer-dilatometer of the Biron-type (Ref 5). Table 2 shows that the temperature function of density develops linearly for all substances investigated. There are 3 tables and 5 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 25, 1957

5 (4)

AUTHORS: Komandin, A. V., Bonetskaya, A. K. (Moscow) SOV/76-33-5-3/33

TITLE: The Dielectric Constant of Esters of Orthohydroxy Benzoic Acid in a Wide Temperature Interval (Dielektricheskaya pronitsayemost' slozhnykh efirov ortogidroksibenzoynoy kisloty v shirokom intervale temperatur)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 5, pp 976 - 982 (USSR)

ABSTRACT: This paper describes measurements of the dielectric constants of methyl, ethyl, isoamyl, phenyl, and 2-naphthyl ester of the acid mentioned in the title. The measurements were carried out in a liquid and undercooled liquid state within a temperature interval ranging of from a temperature below melting point to a temperature at which the dielectric constant decreased rapidly to low values with a constant frequency of the outer electric field; these values did not vary with further temperature decrease and approached the square of the refractive index, i.e. the total amount of electronic and atomic polarization. Figure 1 shows the construction of the condenser used for the measurements. By using a special glass filter crystal-

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lization germs were prevented from being carried along with the liquid and the measurement in undercooled state up to glass-shaped modification without spontaneous crystallization was rendered possible. Tables 1 - 5 show the values of the dielectric constant for the esters mentioned; moreover, the values computed for the Kirkwood coefficient g, as well as for the general and orientation polarization. Figure 2 shows the shape of the curve of the dielectric constant depending on temperature. Hence it appears that with decreasing temperature and constant frequency of the outer electric field ($1.72.10^6$ cycles) the value of the dielectric constant increases, reaches a maximum, and then decreases rapidly to low values. There is a relation between the molecular structure of the substances investigated and the variation of the dielectric constants. The more complicated the structure of the substituent, the lower and flatter the curve of the dielectric constant. The maxima of the dielectric constants are influenced in a similar way. These turning points could be reproduced with an accuracy

of 1 - 2° and represent a specific quantity as to the liquid concerned. There are 2 figures, 5 tables, and 12 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 25, 1957

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206310004-5"

BONETSKAYA, A. K., VOLOKHINA, A. V., KUDRYAVTSEV, G. I. and SKURATOV, S. M. (USSR)

Protsess poliamidirovaniya v tverdoi faze
Polyamidation reaction in the solid phase
IUPAC S II:465-71

report presented at the Intl. Symposium on Macromolecular Chemistry, Moscow, 14-18 June 60.

BONETSKAYA, A.K.; YEROFEYEVA, N.F.; SKURATOV, S.M.

Kinetics and thermal effect of the hydrolysis of some lactams. Izv.vys.ucheb.zav.; khim.i khim.tekh. 3 no.6:1027-1030 '60. (MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova, kafedra fizicheskoy khimii.
(Lactam)

S/076/60/034/04/24/042
B010/B009

AUTHORS: Komandin, A. V., Bonetskaya, A. K. (Moscow)

TITLE: The Dielectric Constants of Some Organic Compounds Within a Broad Temperature Range

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 4, pp. 845 - 849

TEXT: In continuation of previous papers (Refs. 1,2) concerning the relation between the dielectric properties and chemical structures of organic substances in liquid and supercooled liquid phases the dielectric constants of the methyl esters of o-methoxybenzoic acid, o-acetoxybenzoic acid, salipyrine, and benzophenone were measured. The measurements were made by means of an apparatus previously described (Ref. 3) at a frequency of $1.72 \cdot 10^6$ cps and temperatures of from 200 to 400°K. The measured values of the dielectric constants and densities of the substances under investigation as well as the calculated values of the total and oriented polarizations for both the liquid and supercooled phases and of the Kirkwood coefficients g of the intermolecular interaction are given in Tables 1-4. As in the earlier investigations, the curve of the dependence of the

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The Dielectric Constants of Some Organic Compounds Within a Broad Temperature Range

S/076/60/034/04/24/042
B010/B009

dielectric constant upon temperature was observed to show that with decreasing temperature the dielectric constant increases, passes through a maximum, and then drops abruptly to very low values (within a narrow temperature range). The course of the temperature curves in connection with the chemical structures of the substances under investigation is discussed. There are 1 figure, 4 tables, and 6 references, 4 of which are Soviet.

SUBMITTED: July 5, 1958

Card 2/2

BONETSKAYA, A.K.; YEROFEYEVA, N.F.; SKURATOV, S.M.; MUROMOVA, R.S.

Kinetics and thermal effect of the hydrolysis of some N-substituted lactams. Izv.vys.ucheb.zav.; khim.i khim.tekh. 4 no.1:74-77 '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova, kafedra fizicheskoy khimii.
(Lactams) (Hydrolysis)

S/190/62/004/012/002/015
B101/B186

AUTHORS: Skuratov, S. M., Yenikolopyan, N. S., Bonetskaya, A. K., Voyevodskiy, V. V.

TITLE: Mechanism of lactam polymerization

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 12, 1962, 1770-1778

TEXT: In continuation of papers of 1952-54 (last publication Dokl. AN SSSR, 95, 1017, 1954), the polymerization of ε-caprolactam and ζ-enantholactam was studied in the presence of water, water and acid, and water and alkali at 231.5°C. A slightly modified reaction scheme is proposed on the basis of experimental results concerning induction period, maximum reaction rate, time before maximum reaction rate is reached, degree of conversion, heat effect of the reaction: (1) $B + H_2O \underset{k'_1}{\overset{k_1}{\rightleftharpoons}} AH$; (2) $AH + AH \xrightarrow{k_2} P + H_2O$; (3) $AH + P \xrightarrow{k_3} P + H_2O$; (4) $AH + B + X \xrightarrow{k_4} P + X$; (5) $B + P \xrightarrow{k_5} P$;

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Mechanism of lactam...

(6) $B + H_2O + X \xrightarrow{k_6} AH + X$; (7) $AH + X \xrightarrow{k_7} B + H_2O + X$; where B = lactam. AH = amino acid, P = polyamide, X = catalyst. The probable course of these reactions under different conditions is discussed, and the following equations are derived for the rate of polymerization, w: (A) for polymerization of ε-caprolactam in the presence of H_2O: $w = \alpha'[H_2O][B]([B_o]^2 - [B]^2)$, where $\alpha' = k_4k_6/2k_7$; (B) for polymerization of ζ-enantholactam in the presence of water: $w = \alpha'[H_2O][B]\sqrt{[B_o]^2 - [B]^2}$; where $\alpha' = k_5^{0.5}k_2^{0.5}k_6/k_3$; (C) for polymerization of ε-caprolactam in the presence of H_2O and H_3PO_4: $w = \beta'\sqrt[4]{[AcH]}[B]\sqrt{[B_o]^2 - [B]^2}$, where $\beta' = (k_4k_5k_6[H_2O]/k_7)^{0.5}$, and AcH = acid; (D) for polymerization of ζ-enantholactam in the presence of H_2O and H_2PO_4: $w = \alpha'\sqrt[4]{[AcH]}[B]\sqrt[4]{[B_o]^2 - [B]^2}$, where $\alpha' = k_2^{0.25}k_5^{0.75}k_6^{0.5}[H_2O]^{0.5}/k_3^{0.5}$; (e) in the polymerization of ε-caprolactam and ζ-enantholactam in the presence of H_2O and NaOH, the presence of

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NaOH only reduces the induction period without affecting the polymerization kinetics proper. All the experimental results are satisfactorily explained by these equations. There are 3 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 24, 1962

S/190/62/004/012/003/015
B101/B186

AUTHORS: Yenikolopyan, N. S., Bonetskaya, A. K., Skuratov, S. M.

TITLE: Induction period of ε-caprolactam and ζ-enantholactam polymerization under various conditions

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 12, 1962, 1779-1783

TEXT: A set of reaction equations was drawn up in a previous paper (Vysokomolek. soyed., 4, 1770, 1962) for the polymerization of ε-caprolactam and ζ-enantholactam in the presence of water, water and acid, and water and alkali: (1) $B + H_2O \underset{k_1'}{\overset{k_1}{\rightleftharpoons}} AH$; (2) $AH + AH \xrightarrow{k_2} P + H_2O$; (3) $AH + P \xrightarrow{k_3} P + H_2O$; (4) $AH + B + X \xrightarrow{k_4} P + X$; (5) $B + P \xrightarrow{k_5} P$; (6) $B + H_2O + X \xrightarrow{k_6} AH + X$; (7) $AH + X \xrightarrow{k_7} B + H_2O + X$; where B = lactam, AH = amino acid, P = polyamide, X = catalyst, whose functioning groups are either the end-groups of P, in the case of polymerization with water, or

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Induction period of...

H_3^+O ion in the case of polymerization in the presence of acid. In the present paper, the experimental data are used for deriving equations for the induction period as dependent on the amount of H_2O added. Reaction (1) catalyzed by the amino acid gives rise to: $B + H_2O + AH \xrightarrow{k_1'} AH + AH$. The induction period $t = (1/\varphi) \ln w/\alpha$; where $w = \alpha e^{\varphi t}$, $\alpha = k_5' k_1 [B]/k_1'$, and $\varphi = k_1' [B][H_2O]$. In agreement with the experiment, the induction period is inversely proportional to the amount of water added. The induction period decreases with an increased addition of NaOH. In this case, the cooperation of the hydroxyl ion must be taken into account besides reaction (1) and the catalysis by the amino acid: $B + H_2O + OH^- \xrightarrow{k_1''} AH + OH^-$. Hence, $t = (1/\varphi)(\ln w - \ln \alpha)$, where $\varphi = k_2' [B][H_2O]$, $\alpha = k_5' k_1'' [B][OH^-]/k_1'$. Consequently, the kinetics of polymerization proposed interprets the reaction courses correctly. There are 2 figures and 1 table.

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Induction period of...

S/190/62/004/012/003/015
B101/B186

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 24, 1961

Card 3/3

SKURATOV, S.M.; YENIKOLOPYAN, N.S.; BONETSKAYA, A.K.; VOYEVODSKIY, V.V.

Mechanism of lactam polymerization. Vysokom. soed. 4 no.12:1770-1778 D '62. (MIRA 15:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Lactams)
(Polymerization)

YENIKOLOPYAN, N.S.; BONETSKAYA, A.K.; SKURATOV, S.M.

Induction periods of ϵ-caprolactam and ζ-enantholactam polymerization reactions under various conditions. Vysokom. soed. 4 no.12:1779-1783 D '62. (MIRA 15:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Azepinone) (Azocinone) (Polymerization)

L 38634-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM
ACCESSION NR: AP5008374 S/0190/65/007/003/0485/0490

AUTHORS: Salamatina, O. B.; Benetskaya, A. K.; Skuratov, S. M.; Fabrichnyy, B. P.; Shalnova, I. F.; Gol'dfarb, Ya. L.

TITLE: Kinetics and thermal effect of polymerization of some C-alkyl substituted lactams

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 3, 1965, 485-490

TOPIC TAGS: alkylation, polymerization, kinetics, thermal effect

ABSTRACT: A study was made of the kinetics of polymerization of 5-CH_3-, 7CH_3-, 7C_2H_5-and 7C_3H_7-caprolactams and 8-C_2H_5- and 8C_3H_7-enantholactams in the presence of water alone and with different amounts of phosphoric acid at 240C. The 7-C_3H_7-caprolactam was synthesized. The others were obtained from VNIIV. For polymerization in water it was found that the process is autocatalytic for C-alkyl substituted and unsubstituted lactams alike, that the substitution in a lactam molecule sharply lowers the reaction rate, that the degree of conversion from monomer to polymer at maximum rate also declines markedly for both alkylated caprolactams and alkylated enantholactams, and that the time of reaching maximum

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L 38634-65
ACCESSION NR: AP5008374

2

reaction rate for these monomers is increased. When phosphoric acid is present with the water the maximal reaction rate is markedly increased, the rate increasing with concentration of acid; the degree of conversion at the maximum rate decreases and does not depend on the acid concentration; and the time for reaching maximum rate is strongly reduced. It was found that the maximal rate depends on the position of the substituted alkyl in the ring, and that this rate decreases with increase in length of the substituted alkyl. Methyl substitution in caprolactams lowers the thermal effect of polymerization. Ethyl substitution increases the effect, and propyl substitution does not change it. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University); Institut organicheskoy khimii im. Zelinskogo, AN SSSR (Institute of Organic Chemistry, AN SSSR)

SUBMITTED: 30May64 ENCL: 00 SUB CODE: OC, MT

NO REF SOV: 007 OTHER: 011

Card 2/2 fa

CHIL'-GEVORGYAN, G.M.; BONETSKAYA, A.K.; SHURATOV, S.M.

Automation of a double calorimeter for measuring the kinetics of polymerization reaction. Zhur.fiz.khim. 39 no.7:1794-1797 Jl '65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

BONETSKIY, L.K., inzh.

Simplified methods for calculating the nonlinear resistance of the excitation networks of the exciters of synchronous motors in mills. Elek. sta. 34 no.7:84-86 Jl '63. (MIRA 16:8)

KABANOV, P.S., inzh.; BONETSKIY, L.K., inzh.

Concerning L.I. Dvoskin's article "Auxiliary power supply networks for the self-needs of large condensing power plants." Elek. sta. 34 no.10:89-90 O '63. (MIRA 16:12)

BONEV, A.

Preparation for the annual closing of accounts. p. 25.

Vol. 10, no. 11, Nov. 1955
KOOPERATIVNO ZEMEDELIE
Sofiya, Bulgaria

So: Eastern European Accession Vol. 5 No. 1 Jan. 1956

BONEV, A.

Secular change of the solar activity. p. 129.

GODISHNIK. MATEMATIKA I FIZIKA. Sofiia, Bulgaria, Vol. 50, no. 1 pt. 2. 1955/56 (published 1958)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

ACC NR: AP6023498 SOURCE CODE: BU/0016/65/000/007/0405/0408

AUTHOR: Kiryakov, I.; Bonev, A.; Spirov, G.

ORG: Institute for Scientific Research in Dermatology and Venereology/headed by Prof. P. Popkhristov/ (Nachroizsledovatelski kozhno-venerologichen institut)

TITLE: Some aspects of the epidemiology of lues

SOURCE: Suvremenna meditsina, no. 7, 1965, 405-408

TOPIC TAGS: epidemiology, nervous system disease, genitourinary system disease, infective disease, man

ABSTRACT: In one group, up to 65% of male syphilitic patients had contracted the infection during homosexual relationships; analysis of 154 homosexual men: ages (80 were below 25 years old) 69 'true' and 85 'occasional' or 'opportunistic' homosexuals; lues was diagnosed in 57 (37%) mostly with 'atypical' (i.e. anal, etc.) lesions. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: 00Mar65 / ORIG REF: 002 / OTH REF: 015

Card 1/1

POPKHRISTOV, P.; ALKALAI, M.; BONEV, A.

Errors in the diagnosis of early syphilis. Suvr. med. (Sofiia) 15 no.7:32-37 '64

KIRIAKOV, Iv.; BONEV, A.; SPIROV, G.

Some observations on the distribution of syphilis. Suvr. med. (Sofiia) 16 no.7:405-408 '65.

1. Nauchnoizsledovatelski kozhno-venerologichen institut (direktor prof. P. Popkhristov).

SPIROV, G.; BONEV, As. KIRYAKOV, Iv.

Current problems of urogenital trichomoniasis. Suvr. med. 16 no.11: 690-700 '65.

1. Nauchno-izsledovatelski kozhno-venerologichen institut (direktor - prof. P. Popkhristov).

BONEV, B., inzh.

Plant for metal-cutting machines. Mashinostroene 11 no.6:34-35 Je '62.

BONEV, B.

A small rotatable dome for a telescope. Biul. VAGO no.34: 51-54 '63. (MIRA 17:4)

1. Narodnaya astronomicheskaya observatoriya imeni Yu.A. Gagarina, g.Stara Zagora, Bolgariya.

BONEV, B., inzh.; NEDELCHEV, L., inzh.

Transistor amplifier pair with high-grade indexes. Radio i televiziia 13 no.3:94-95 '64.

BONEV, B., inzh.

Unified units of aggregate machines and automatic lines manufactured by the Metal-Cutting Machine Factory, Sofia.
Mashinostroene 13 no.5:43-45 '64

BONEV, Bogdan.

The light of October. Kryl.rod. 8 no.10:25 O '57. (MIRA 10:10)

1.Nachal'nik otdela TSentral'nogo Komiteta Dobrovol'nogo obshchestva sodeystviya oborone, Sofiya.
(Bulgaria--Relations (General) with Russia)
(Russia—Relations (General) with Bulgaria)

BONEV, Boncho P. (Plovdiv)

Determining the direction of induced electromotive force by magnetoelectric amperometer. Mat i fiz Bulg 5 no.6:57 N-D '62.

BONEV, D.

Selecting the method of purifying water for the water purification station for the water supply lines of Sofia. Nauch. trudy AKKH no.22:91-102 '63. (MIRA 18:5)

1. Glavnyy inzh. proyekta vodoochistnoy stantsii v g.Sofii.

ANGELOV, A., dots.; BONEV, D., inzh.

The water supply of Sofia from the Iskur Dam. Khidrotekh i melior 7 no.9:287-288 '62.

ANGELOV, G.; DENEV, I.; STOIMENOV, Kr.; MUKHAREV, N.; BONEV, D.

Distribution of hydatigenous taeniasis and cysticercosis in northeastern Bulgaria. Izv khelmint lab BAN 9:91-96 '64.

BONEV, Dimitur, inzh.

Experimental station at the "Pasarel" Hydroelectric Power Plant. Tekh delo no.437:3 4 Ag '62.

1. Glaven inzhener na proekt "Vodoprechistvatelna stantsiia na gr. Sofiia."

BONEV, Dimitur Iv., inzh.

The new water supply of Sofia. Khidrotekh i melior 7 no.4:121-123 '62.

BONEV, Dimitur, inzh.

A sewage disposal plant for the city of Sofia. Khidrotekh i melior 7 no.9:262-264 '62.

BONEV, Dimitur, inzh.

Fluorination of water. Khidrotekh i melior 8 no. 2:63 '63.

BONEV, Dim., inzh.

Deactivation of water. Tekh delo 467:3 9 Mr '63.

BONEV, Dimitur, inzh.

Reagents in soft water treatment. Khidrotekh i melior 9 no. 4: 109-110 '64.

BONEV, E.

BONEV, E. Rubber on the capitalist market. p.24.

Vol. 6, no. 6, 1956, GEOGRAFIIA, Sofiya, Bulgaria.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10, Oct. 1956.

B. NEV, E.

Gathering the crops from the seed fields. p.16. KOOPERATIVNO ZEMEDELIE. (Ministerstvo no zemedelieto) Sofiia. Vol. 11, no. 6, June 1956

SOURCE: East European Accessions List, (EEAL), Library of Congress, Vol. 5 no. 12, December 1956

BONEV, E.

Some sorts of field crops. p.22.
(KOOPERATIVNO ZEMEDELIE, No. 7, July 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957, Uncl.

BONEV, E.

Suitable hybrid-corn seed. p. 14.
(Kooperatvino Zemedelie, Vol. (12), no. 2, Feb. 1957. Sofiia, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

BONEV, E.

High-quality seed material. p. 16.
(Kooperatvino Zemedelie, Vol. (19) no. 6, June 1957. Sofiia, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

BONEV, I.

BONEV, I. Some deficiencies in the standards for lumber materials. p. 38. Vol. 6, no. 7, July 1956. RATSIONALIZATSIA. Sofiia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

BONEV, Il., inzh.

Giant sequoia (Sequoiadendron giganteum) abroad and in Bulgaria. Priroda Bulg 10 no.6:80-87 '61.

1. Gorsko stopanstvo, gara Svoge.

BONEV, Khr.

A great start. Nauka i tekh mladezh 15 no. 2:10-12 F '63.

BONEV, Khr.

Hand in hand with time and technology. Nauka i tekh. mladezh 16 no. 4:1-3 Ap '64.

BONEV, Khr.

Industrial electronics. Nauka i tekh mladezh 16 no.12:1-3 '64.

BONEV, Khr.

Bulgarian plastics. Nauka i tekh mladezh 16 no.7/8:1-4
Jl-Ag '64

BONEV, L.

Amateur amplifiers. Ministry of Communication, #12:24:Dec. 54

BONEV, L.

Circuit Diagram of the 2 plus 1 Amateur Radio Receiver. Ministry and Communication, #12:25:Dec. 54

BONEV, L.

More about phonograph amplifiers. p. 30.
(Radio, Vol. 5, no. 12, 1956, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

BONEV, L.

Appartus for discovering metal objects. p. 57.
(RADIO I TELEVIZIIA, Vol. 6, no. 2, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

BONEV, L.

Extreme stage for amateur radio transmitter. p. 21.
(RADIO I TELEVIZIIA, Vol. 6, no. 6, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

KOLAROV, V.; BONEV, L.; ROBEV, S.

Scinteillating properties of some triaryl-substituted representatives of the imidazole series. Doklady BAN 15 no.2:167-170 '62.

1. Otdeleniye radiobiologii, Sofia, 56. Predstavleno chl.-korr. A. Spasovym [Spasov, A.].

B/007/62/000/002/006/012
D204/D307

AUTHORS: Kolarov, V., Bonev, L. and Robev, S.

TITLE: Studies of the scintillating properties of some triazyl-substituted members of the imidazole series

PERIODICAL: Referativnyy byulleten' Bolgarskoy nauchnoy literatury, Khimiya i khimicheskaya tekhnologiya, no. 2, 1962, 7, abstract 109, Doklady BAN, 15, 1962, book 2, pp 167-170

TEXT: The authors studied the scintillating properties of some triazyl-substituted imidazoles (2,4,5-triphenylimidazole, 2,4,5-tri(4-tolyl)-imidazole, and 2,4,5-tri(2-thionyl)-imidazole) and also hydrobenzamide, amarin and isoamarin, having the same atomic structure. Xylene solutions of various concentrations were prepared from these compounds, and their scintillating properties were studied under standard conditions. A Co^{60} preparation with 10^6 disintegrations per minute was used as the source of ionization. The triazyl-substituted imidazoles showed good scintillation properties and,

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Studies of the scintillating ...

bearing in mind their ease of preparation, can be successfully used in radiometry. Photoluminescent maxima in the excitation spectra of 2,4,5-triphenylimidazole and 2,4,5-tri(4-tolyl)-imidazole occur at 390 and 400 mμ and are in the spectral regions convenient for working with ordinary photomultipliers. These substances may also be used for displacing the photoluminescent spectra of other compounds, the luminescent maximum of which lies in the ultraviolet region of the spectrum. Amarin and isomarin exhibit no scintillating properties. (Otdeleniye radiobiologicheskikh nauk, Sofia, 36 (The Department of Radio-Biological Sciences, Sofia, 36))
[Abstracter's note: Complete translation]

Card 2/2

KARADZHOV, At.; BONEV, L.

The direct-current amplifier for the recording of weak currents.
Radio i televiziia 11 no.8:238-239 '62.

BONEV, L., inzh.

The intercommunicating system. Radio i televiziia 11 no.10:306 '62.

BONEV, L., inzh.

Radio electronics and biology. Radio i televiziia 13 no. 2: 5-2 '64.

RAINOV, A.; DENEV, L.

Clarification of some aspects of respiration with the help of electronic registration of respiratory movements. Nauch. tr. vissh. med. inst. Sofiia 43 no.5:31-39 '64

1. Chair of Pathophysiology (Director: Prof. St. Pisarev) and Institute of Radiology and Radiation Hygiene (Director: Doz. N. Nikolov).

ROBEV,S.; L .V,I.; BONEV,L.

The distribution of N-(4-nitrophenyl)-benzamidine-C-1/ in the organs of white rats under conditions of its use for radioprotective purposes. Dokl. Bolg. akad. nauk 18 no.1:51-54 '65

1. Submitted on August 19, 1964.

L 4365-66 EWT(m)

ACC NR: AP5028424 SOURCE CODE: BU/0011/65/018/001/0051/0054

AUTHOR: Robev, S.; Bayev, I.; Bonev, L.

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B

ORG: Scientific-Research Institute of Radiology and Radiation Hygiene, Sofia (Nauchno-issledovatel'skiy institut radiologii i radiatsionnoy gigiyeny)

TITLE: Distribution of N-(4-nitrophenyl)-benzo-C^{14}-amidine in organs of white rats when used for radiation protection

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 1, 1965, 51-54

TOPIC TAGS: mouse, rat, antiradiation drug, organic amide, radiation biologic effect

ABSTRACT: [Russian article] The study of the distribution within organisms of compounds exhibiting radiation protection properties is of great importance for the explanation of the particular protective mechanism. The authors' earlier studies of the radiation protection action of amide compounds on mice and rats (see, e.g., J. Baev, S. Robev, Compt. rend. Acad. bulg. Sci., 15, 1962, No 6, 613) uncovered essential differences between their protective actions and those of sulfhydryl radiation protectors of the cysteamine group. The present study concentrated on a detailed investigation of the distribution of N-(4-nitrophenyl)-benzoamidine and, in particular, its hydrochloride in white rats. Tabulated results show that the variations of the specific activity observed in organs of various animals exhibite

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ACC NR: AP5028424

measurable fluctuations caused by individual responces of various organisms. These fluctuations prevent the establishment of any quantitative connections between the amount of incorporated labeled amidine found now and the amounts reported in earlier references. Nevertheless, new data support the assumption that the local amidine concentration has little relation to the appearance of the radiation protection effect. While the amidine distribution pattern is the same during the parenteral and internal introduction, the radiobiological effect is completely different. As reported earlier (Il. Bayev, Rentgenologiya i radiologiya, 1964), the peroral introduction fails to produce any radiation protection whatsoever. The work was presented by A. Spasov, Corresponding Member, 12 Aug 64. Orig. art. has: 1 table. [JPRS]

SUB CODE: LS / SUBM DATE: 12Aug64 / ORIG REF: 008 / OTH REF: 004
SOV REF: 002

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Card 2/2

L 00155-66 EWT(m) DIAAP

ACCESSION NR: AP5025542 BU/0011/65/018/003/0239/0242

AUTHOR: Bonev, L.; Todorov, S; Robev, S.

TITLE: Possibility of a quantitative tracking of the precipitation reaction using radioactively labeled chromium -51

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 3, 1965, 239-242

TOPIC TAGS: chemical labelling, chromium, radioisotope, chemical precipitation, iron, radiation chemistry, biochemistry, tracer study

ABSTRACT: The existing methods for gauging the precipitation reaction are far from a true quantitative determination of the antigen--antibody reaction. In all the cases one does not know the exact composition of the precipitate which is usually contaminated by admixtures which reacted with the reagents used. In addition, the usual methods are slow and cumbersome. The present paper presents the first results using radioactively labeled trivalent chromium-51. The trivalent chromium was chosen because it can be hydrolyzed into nonsoluble chromium hydroxide at pH7 characterizing the usual precipitation reaction. The results were in agreement with data from other methods. Further studies using double radioactive labeling by chromium-51 and iron-59

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ACCESSION NR: AP5025542

showed that one can achieve a sufficient degree of accurate reproducibility to make the study of interactions between the antigen-antibody complexes possible including the radiation protection effects. Investigations of this type and the utilization of other radioisotope tracers will be described in a subsequent paper. Orig. art. has: 1 graph and 1 table.

ASSOCIATION: Institut Radiologii i Radiatsionnoy Gigiyeny, Darvenitsa-Sofia, (Institute for Radiology and Radiation Hygiene)

SUBMITTED: 00 ENCL: 00 SUB CODE: GC, LS

NR REF SOV: 000 OTHER: 005 JPRS

Card 2/2

BULGARIA

BONEV, I., Special Polyclinic for Students, Varna (chief physician: P. STOYANOV)

"Ambulatory Treatment of Enuresis Nocturna in Children of School Age, with Psychopharmacological Drugs."

Sofia, Nevrologiya, Psikhiatriya i Nevrokhirurgiya, Vol 5, No 2, 1966, pp 116-121

Abstract [author's Russian and English summaries, modified]: A preliminary report on experience with the ambulatory psychopharmacological treatment of enuresis nocturna in 140 children of school age. In 106 cases tofranil was employed, alone or in combination with chlorpromazine, meprobamate or actedron. The rest of the cases were treated only with chlorpromazine, meprobamate and actedron, with almost identical therapeutic effects. Treatment was continued over an average period of two-three months. The immediate results were good in 89.3 percent; unsatisfactory, in 5.7 percent; and with no effect, in 5 percent of the patients. It is pointed out that this treatment is superior to former antienuretic methods since it influences rapidly and simultaneously enuresis and a number of additional neurotic and cerebrasthenic syndromes. Side effects were minor and could be abolished by decreasing the dosage. The author regards this treatment as pathogenetically substantiated and recommends its broad application. 14 Soviet-bloc and 12 Western refs. Received in Dec 64.

KALCHEV, K.; BONEV, L.; MITRANI, L.; DESSEV, G.[Desev, G.]; ROBEV, S.

Studies on the possibility of eliminating radioactive strontium from milk by means of ion-exchange resins. Doklady BAN 14 no.5:475-478 '61.

1. Research Base on the Problems of Radiation Diseases and Radiological Protection at the Onkological Research Institute, Sofia. Submitted by Corresponding Member Al. Spassov[Spasov, Al.]

(Strontium) (Milk) (Radioactivity)

Bonev, M.

BULGARIA/Chemical Technology - Chemical Products and Their Application - Food Industry. H-28

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, 9677

Author : Bonev M.
Inst :
Title : Chemical and Technological Characterization of Pasteurized Tomato Juice from Different Varieties of Tomatoes.

Orig Pub : Nauchn. tr. Vissh. in-t khranit. i vkus. prom-st. Plovdiv, 1956, 3, 315-323

Abstract : Presentation of the results of chemical and technological characterization of pasteurized tomato juices obtained from tomato varieties newly developed in Bulgaria. In all the juices the content of soluble solids amounts to 6.38-5.78%, i.e., exceeds the specified minimum permissible norm (5.5%); the content of sugars is of 4.06-3.40%, total acidity 0.40-0.28%, the ratio of sugar content to acid content is 14.25-8.22.

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COUNTRY : Bulgaria H
CATEGORY : Chemical Technology. Chemical Products and Their Utilization. Food Industry.
ABS. JOUR. : RZhKhim., No 19, 1959, No. 69543

AUTHOR : Stefanova, M.; Bonev, M.; Duchevska, Kh.; Geordiyev,*
INSTITUTE :
TITLE : Study of Certain Varieties of Fresh and Stored Tomatoes and of Concentrates Derived from Them.
ORIG. PUB. : Izv. In-te rasteniyevdstvo. Bulg. AN, 1958, kn. 6, 63-80

ABSTRACT : Through experimentation performed on 4 varieties of tomatoes it was established that in the preparation of concentrates (C) from tomatoes, that were stored for 2-4 days, the consumption of raw materials for 1 kg of 30% C increases by 0.1-0.7kg. Storage of tomatoes for 2-4 days prior to their processing lowers considerably their quality [loss up to 24.5% of their sugar content and up to 38.13% of their ascorbic acid (I) content]. C made of tomatoes that were stored for 2-4 days

*D.; Yankov, S.

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COUNTRY :
CATEGORY : H

BONEV, M.; YANKOV, S. (Plovdiv, Bolgariya)

Comparative study of the amino acid compostion of some green vegetables. Vop.pit 21 no.4:84-85 Jl-Ag '62. (MIRA 15:12)
(VEGETABLES) (AMINO ACIDS)

BONEV, M.; DIMITROV, St.; IAnkov, St.; VALDIMIROV, G.

Chemical composition of the wild rose (Rosa L.) species in Bulgaria. Priroda Bulg 12 no. 6:42-46 N-D '63.

BONEV, N.

Basic principles and tasks of technical standardization of labor. p. 4.
LEKA PROMISHLENOST, Sofiya, Vol. 4, no. 2, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

BONEV, N.

To Fulfill the Collective Working Contracts. Leka Promishlenost (Light Industry), #9:5:Sep. 1955

Boneff, N. Recherches nouvelles sur la distribution des formations sur la surface lunaire. Annuaire [Godišnik] Univ. Sofia. Fac. Sci. Livre 1. (Math. Phys.) 44, 67–82 (1948). (French. Bulgarian summary)

Source: Mathematical Reviews, Vol 12 No. 4 1